



भारत का राजपत्र The Gazette of India

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं० 34]
No. 34]

नई दिल्ली, शनिवार, अगस्त 24, 1991 (भाद्रपद 2, 1913)
NEW DELHI, SATURDAY, AUGUST 24, 1991 (BHADRA 2, 1913)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2 [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE
PATENTS AND DESIGNS
Calcutta, the 24th August, 1991

ADDRESS AND JURISDICTION OF OFFICES OF THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

Patent Office Branch,
Todi Estates, III Floor,
Lower Parel (West),
Bombay-400 013.

The States of Gujarat, Maharashtra and Madhya Pradesh and the Union Territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

Telegraphic address "PATOFFICE".

Patent Office Branch,
Unit No. 401 to 405, III Floor,
Municipal Market Building,
Saraswati Marg, Karol Bagh,
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

Telegraphic address "PATENTOFIC".

Patent Office Branch,
61, Wallajah Road,
Madras-600 002.

The States of Andhra Pradesh, Karnataka, Kerala, Tamilnadu, and the Union Territories of Pondicherry, Laccadive, Minicoy and Aminidivi Islands.

Telegraphic address "PATENTOFIS".

Patent Office (Head Office),
"NIZAM PALACE", 2nd M.S.O. Bldg.,
5th, 6th and 7th Floor,
234/4, Acharya Jagdish Bose Road,
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

Fees — The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Offices or by Bank Draft or Cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

एकसूच तथा अभिकल्प

कलकत्ता, दिनांक 24 अगस्त 1991

पेटेंट कार्यालय के कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा बम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं, जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,
तीसरा तल, लोअर परेस (पश्चिम),
बम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोवा,
दमन तथा दिव एवं दादरा और नगर दवेली।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय शाखा,
इकाई से० 401 से 405, तीसरा तल,
नगरपालिका बाजार भवन,
सरस्वती मार्ग, करोल बाग,
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा
उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय शाखा,

61, वालाजाह रोड,

मद्रास-600 002

आंध्र प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र
पाण्डिचेरी, लक्षद्वीप, मिनिर्कोय तथा एमिनिदिवि द्वीप।

तार पता—''पेटेंटोफिस''

पेटेंट कार्यालय (प्रधान कार्यालय),
निजाम पैलेस, द्वितीय बहुतलीय कार्यालय
मन 5, 6 तथा 7वां तल,
234/4, आचार्य जगदीश बोस रोड,
कलकत्ता-700 020

भारत का अवशेष क्षेत्र

तार पता—''पेटेंट्स''

पेटेंट अधिनियम, 1970 या पेटेंट नियम, 1972 में अपेक्षित सभी
आवेदन-पत्र, सूचनाएं, विवरण या अन्य प्रलेख पेटेंट कार्यालय के केवल
उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क : —शुल्कों की अदायगी या तो नकद की जाएगी अथवा उपयुक्त
कार्यालय में नियंत्रक को मुगलान योग्य धनादेश अथवा ढाक आदेश या जहाँ
उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को
मुगलान योग्य बैंक द्राफ्ट अथवा चेक द्वारा की जा सकती है।

CORRIGENDA

Under the headings "Patent Sealed" in the Gazette of India, Part-III, Section-2, dated 25th May, 1991, read the number 158802 as 158803.

In the Gazette of India, Part-III, Section-2, dated 17th August, 1991 in the heading 'COMPLETE SPECIFICATION ACCEPTED' read as 169018 instead of 168018.

APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE
234/4, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-20

The dates shown in the crescent brackets are the dates claimed under section 135, of the Patents Act, 1970.

The 15th July, 1991

539/Cal/91 Dev Dutt Mohanty. Method for the production of thermally sensitive paper.

540/Cal/91 Hitachi Ltd. Puffer type gas-insulated circuit breaker.

541/Cal/91 Fritz Stahlecker and Hans Stahlecker. A spinning machine system.

542/Cal/91 Hoechst Celanese Corporation. Preparation of aromatic acetamides from aryl methyl ketones.

543/Cal/91 Hoechst Celanese Corporation. Process for preparing pyridinecarboxylic acid derivatives.

544/Cal/91 Jack M Lundeen. Rotatable sun chair.

545/Cal/91 John K Junkers. Fluid-Operated wrench.

APPLICATION FOR PATENTS FILED IN THE PATENT
OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUN MILL
COMPOUND, LOWER PAREL (W), BOMBAY-13

The 11th June, 1991

172/Bom/91 Hindustan Lever, Ltd. 11th June 1990, Great Britain. FCC Processing using catalyst compositions containing metal ion-Exchanged zeolites.

The 12th June, 1991

173/Bom/91 Dr. Aditya Ramchandra Kamat. The inflatable polythene nasal tampons.

The 13th June, 1991

174/Bom/91 Hindustan Lever Limited. Detergent Bar.

175/Bom/91 Mahendra Manilal Bhalani. Improved process for manufacturing Carrom Board and the like indoor games.

The 17th June, 1991

176/Bom/91 Eagle Flask Industries Limited. A food carrying and warming device.

177/Bom/91 Eagle Flask Industries Limited. A device for firmly holding together a plurality of container units stacked one above another.

The 18th June, 1991

178/Bom/91 Hindustan Lever Limited, 20th June 1990, Great Britain. Shampoo Composition.

179/Bom/91 Budra Research Ltd. Catalyst, method of manufacturing the said catalyst, and the process for removal of sulphur compounds and nitrogen oxides from fluid streams by using the said catalyst.

180/Bom/91 Dr. Madan Kataria. Steam Inhalation and Fomentation appliance (Medisteam Appliance).

The 20th June, 1991

181/Bom/91 Crisana Synthetics Pvt. Ltd. A self sealing container.

The 24th June, 1991

182/Bom/91 Plastart Electronics Pvt. Ltd. An improved lock for telephone set having push button dial module.

183/Bom/91 Garware-Wall R & D Division. An improved telephone cable pulling system.

184/Bom/91 Permionics (India) Ltd. A water purifier.

185/Bom/91 Pradeep Sinha. A float valve for regulating flow of water into a container.

The 25th June, 1991

186/Bom/91 Ashok Dattatraya Datar. Dispensing attachment for collapsible tubes.

The 27th June, 1991

187/Bom/91 Shiv Praasad Sood. An improved recuperative heat recovery system.

188/Bom/91 Pandit Rupla Patil. High speed sensitive printed circuit and tool room bench type-drilling machine.

189/Bom/91 Surendra Himmatlal Shah, Jayesh Narottomdas Shah. Automatic self-contained water sprinklers/sprayers.

The 28th June, 1991

190/Bom/91 Crompton Greaves Ltd. A compact pedal operated ac power generating device.

191/Bom/91 Crompton Greaves Ltd. A compact pedal operated dc power generating device.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

The 8th July, 1991

513/Mas/91 C.P. Phillipose. A multi-purpose kit assembly convertible into a trolley or chair or pram or trekking kit.

514/Mas/91 Minnesota Mining and Manufacturing Company. Sheet of loop material and garments having such loop material incorporated therein.

515/Mas/91 Creusot-loire Industrie. Device for controlling automatic loading of a gun.

The 9th July, 1991

516/Mas/91 Arumugam Vaithianathan. Improvements in or relating to the propelling mechanism of bicycles, tri cycles, cycle-rickshaws, cycle delivery vans or like pedal propelled vehicles.

517/Mas/91 R. Ganesan. Automobile headlights dimmers. (Automatic electronic control).

518/Mas/91 Maschinenfabrik Rieter AG. A method and a device for controlling an opening process, for example at a card.

519/Mas/91 Kurimoto, Ltd. Compound partition diaphragm for use in ball mill.

520/Mas/91 Kurimoto, Ltd. Flow rate regulator for use in ball mill.

521/Mas/91 Caterpillar Inc. Flexible drive transmitting coupling.

522/Mas/91 Congoleum Corporation. Inlaid vinyl sheeting process and product.

The 10th July, 1991

523/Mas/91 Eros Pharma Pvt. Ltd. Method of making novel sustained release pellets.

524/Mas/91 Huls Aktiengesellschaft. Process for the purification of an oxidation off gas.

525/Mas/91 Huls Aktiengesellschaft. Process for the purification of an oxidation off gas with energy recovery.

526/Mas/91 Huls Aktiengesellschaft. Process for reaminization of an optically active amine acid amide.

527/Mas/91 DSM N.V. Process for the preparation of an optically active amino acid amide.

The 11th July, 1991

528/Mas/91 Daney Developments Inc. A vacuum insulated container. (Divisional to the Patent Application No. 117/Mas/88).

- 529/Mas/91 Elenjikal Joseph Sunny. A tilting type wet grinding machine.
- 530/Mas/91 Himont Incorporated. A propylene polymer film forming composition. (Divisional to P.A. No. 758/Mas/89).
- 531/Mas/91 Heraeus Elektrochemie GmbH. Power lead for an electrode

CAL — 3
DEL — 1
MAS — 18
BOM — 3

ALTERATION OF DATE UNDER SECTION 16

- 169058 Ante-dated March 19, 1986.
(649/Cal/88)
- 169059 Ante-dated March 17, 1986.
(650/Cal/88)

OPPOSITION PROCEEDINGS

(1)

The opposition entered by Vikram Forgings & Allied Industries Private Limited to the grant of a Patent on Application No. 164480 made by Trade and Industry Private Limited, as notified in the Gazette of India, Part-III, Section-2, dated the 7th October, 1989 has been dismissed and it is ordered that the application for Patent No. 164480 shall be sealed in the prescribed manner.

(2)

An opposition has been entered by Trade and Industry Private Limited, Calcutta to the grant of a patent on application No. 168078 made by Shri Hariprasad Prasanna, Madras.

(3)

An opposition has been entered by Trade and Industry Private Limited, Calcutta to the grant of a patent on application No. 168035 made by Shri Hariprasad Prasanna.

(4)

The opposition entered by Orissa Cement Limited to the grant of a patent on the application for Patent No. 161490 as notified in the Gazette of India Part-III, Section 2 dated the 9th July, 1988 has been dismissed and patent has been ordered to be sealed on the application.

(5)

An opposition has been entered by Hindustan Lever Limited to the grant of a patent on application No. 168153 made by Degusa Aktiengesellschaft.

PATENTS SEALED

167053 167195 167213 167214 167215 167217 167230 167236 167309
167323 167324 167358 167380 167399 167400 167401 167402 167406
167408 167409 167410 167420 167424 167428 167438

AMENDMENT PROCEEDINGS UNDER SECTION 57

Notice is hereby given that Hoechst Aktiengesellschaft of D-6230 Frankfurt am Main 80, Federal Republic of Germany have made an application under Section 57 of the Patents Act, 1970 for amendment of specification of their application for Patent No. 168265 for "Process for the preparation of water-soluble monoazopyrazolone compounds" The amendments are by way of correction.

The application for amendment and the proposed amendments can be inspected free of charge at Patent Office, 234/4, Acharya Jagadish Bose Road, Calcutta-700020 or copies of the same can be had on payment of the usual copying charges. Any person interested in opposing the application for amendment may file a notice of opposition on the prescribed form 30 within three months from the date of this notification at the Patent Office Calcutta. If the written statement of opposition is not filed with the notice of opposition it shall be left within one month from the date of filing the said notice

RENEWAL FEES PAID

149595 150150 150312 150432 150589 150917 150953 151585 151723
151737 152158 152223 152267 152708 152739 152762 152932 153584
153669 154187 154255 154643 154793 154938 154964 155191 155261
155262 155263 155277 155290 155328 155374 156276 156470 165491
156683 157076 157197 157496 157685 158402 158456 159077 159091
159096 159200 159721 160110 160111 160849 160869 160938 161036
161037 161040 161466 161602 161832 161833 162071 162112 162744
162787 162929 163090 163301 163526 164093 164365 164908 165086
165057 165208 165708 166197 166384 166629 166633 167270 167370

CESSATION OF PATENTS

153190 153191 153192 153199 153202 153203 153204 153206 153208
153210 153216 153217 153219 153220 153221 153224 153226 153229
153230 153231 153232 153234 153235 153237 153238 153239 153246
153248 153249 153250 153254 153255 153257 153259 153260 153265
153266 153267 153269 153270 153272 153275 153281 153282 153291
153292 153295 153296 153303 153309 153312 153313 153314 153317
153318 153323 153327 153329 153334 153335 153340 153343

RESTORATION PROCEEDINGS

(1)

Notice is hereby given that an application for restoration of Patent No. 151025 dated the 28th November, 1978 made by THE INDIAN CABLE COMPANY LTD. on the 20th September, 1990 and notified in the Gazette of India, Part III, Section 2 dated the 12th January 1991 has been allowed and the said patent restored.

(2)

Notice is hereby given that an application for restoration of Patent No. 161927 dated the 11th October, 1985 made by TATAROBINS-FRASER LTD. on the 7th September, 1990 and notified in the Gazette of India, Part III, Section 2 dated the 12th January 1991 has been allowed and the said patent restored.

(3)

Notice is hereby given that an application for restoration of Patent No. 164511 dated the 10th October, 1985 made by SHREE KRISHNAKESHAV LABORATORIES LIMITED on the 17th September, 1990 and notified in the Gazette of India, Part III, Section 2 dated the 12th January 1991 has been allowed and the said patent restored.

(4)

Notice is hereby given that an application for restoration of Patent No. 160647 dated the 13th February, 1984 made by PRADIP WAMAN DESAI on the 11th August, 1989 and notified in the Gazette of India, Part III, Section 2 dated the 6th January 1990 has been allowed and the said patent restored.

COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

स्वीकृत सम्पूर्ण विनिर्देश

एतद्वारा यह सूचना दी जाती है कि सम्बन्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अग्रिम ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियंत्रक, एकस्व को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी लिखित वक्तव्य, उक्त सूचना के साथ अथवा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फाइल किए जाने चाहिए।

“प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वर्गीकरण, भारतीय वर्गीकरण तथा अन्तरराष्ट्रीय वर्गीकरण के अनुरूप हैं।”

नीचे सूचीगत विनिर्देशों की सीमित संख्यक में मुद्रित प्रतियाँ, भारत सरकार भुक डिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मूल्य 2/- रु० है (यदि भारत के बाहर भेजे जाएं तो अतिरिक्त डाक खर्च)। मुद्रित विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदर्शित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टंकित अथवा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार जिसे उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरांत उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुणा करके; (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

CLASS : 152-E.
Int. Cl : C 08 1 23/00.

169031

THERMOPLASTIC COMPOSITIONS.

Applicant : NORSOLOR, OF TOUR AURORE, PLACE DES REFLETS, CEDEX 05, F-92080, PARIS LA DEFENSE 2, FRANCE.

Inventors : (1) AUDUREAU JOEL, (2) CRENNAN VINCENT.

Application No. 375/Cal/1988, filed on 6th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

Thermoplastic composition containing :

(a) less than 90% and at least 2% by weight of at least one polymer (A) of ethylene and, if desired, of at least one α -olefin containing from 3 to 12 carbon atoms, the said polymer containing at least 70 mol% of units derived from ethylene, and

(b) more than 10% and up to 98% by weight of at least one polymer (B) containing at least 85% mol% of units derived from at least one α -olefin containing from 3 to 12 carbon atoms and not more than 15 mol% of units derived from ethylene, characterised in that the measured limiting viscosity of the polymer (A) is between 1.3 and 100 times its limiting viscosity calculated from the molecular mass distribution.

Compl Specn. 16 Pages.

Drg. NIL.

CLASS : 33-D, 105-C, 108-C, 130-F.
Int. Cl. : G 01 n 1/00, 1.02.

169032

APPARATUS FOR TAKING A SAMPLE OF MOLTEN METAL FROM A VESSEL CONTAINING MOLTEN METAL.

Applicant : INJECTALL LIMITED, OF ABBEY HOUSE, 453, ABBEY LANE, SHEFFIELD, S7 2RA, ENGLAND.

Inventors : (1) ANTHONY THROWER, (2) KENNETH WILLIAM BATES.

Application No. 344/Cal/1988, filed on 27th April, 1988.

(Convention dated 1st May, 1987; No. 8710378; United Kingdom)

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

14 Claims

Apparatus for taking a sample of metal from a vessel containing molten metal, comprising a refractory block for installing in a wall of the vessel, the block being traversed by at least one passage which has a frangible or dislodgeable passage blocking refractory closure element therein, a rigid elongated pipe, such as herein described, movable lengthwise in the passage, a sample mould in communication with the pipe, and means, such as herein described, activatable to advance the pipe forcibly in forward direction, in use, to cause a forward end of the pipe to strike and break or dislodge said closure element, whereby molten metal gains access to the pipe and is free to flow along the pipe to enter the mould.

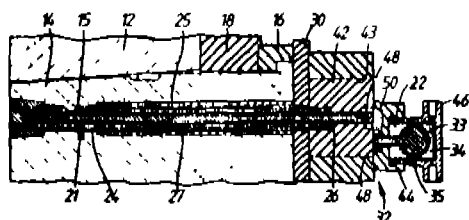


Fig. 3

Compl. Specn. 21 Pages.

Drg. 1 Sheet.

CLASS : 35-A, 152-E.
Int. Cl. : B 28 b 1/00; D 01 f 6/00.

169033

AN IMPROVED FIBROUS PULP OF ORIENTED POLYETHYLENE FIBRIDS AND PROCESS FOR MAKING SAME.

Applicant : E.I. DU PONT DE NEMOURS AND COMPANY, LOCATED AT WILMINGTON, DELAWARE, U.S.A.

Inventors : (1) DAVID MARK GALE, (2) JOSEPH ROBERT GUCKERT.

Application No. 396/Cal/1988, filed on 17th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

10 Claims

An improved fibrous pulp of oriented polyethylene fibrids, the improvement comprising the fibrids averaging no greater than 1.2 millimeters in length, the pulp having a drainage factor of at least 2.5 seconds per gram and the pulp being capable of forming a 34-g/m², wet-laid, dried sheet which has an opacity of at least 75% and an opacity variance of no greater than 8.

Compl Specn. 15 Pages.

Drg. NIL.

CLASS : 150-G.
Int. Cl. : F 16 I 21/00.

169034

A JOINT FOR CASTING PIPES AND SLOTTED PIPES.

Applicant : HYDERABAD INDUSTRIES LTD., SANAT NAGAR, HYDERABAD-500 518, ANDHRA PRADESH, INDIA.

Inventor : MARASA SAMBASIVA RAO.

Application No. 414/Cal/1988, filed on 24th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

8 Claims

A joint for casing pipes and slotted pipes for pumping off sub-soil and/or underground water comprising a coupling sleeve secured to adjacent ends of two pipes, at least one flexible structural ring shaped member located in juxtaposed grooves provided around the ends of each of the adjacent pipes and the inner periphery of the coupling sleeve and at least one sealing ring made of rubber or other resilient material located in separate grooves on the inner periphery of said sleeve and held tightly by the adjacent ends of the pipes.

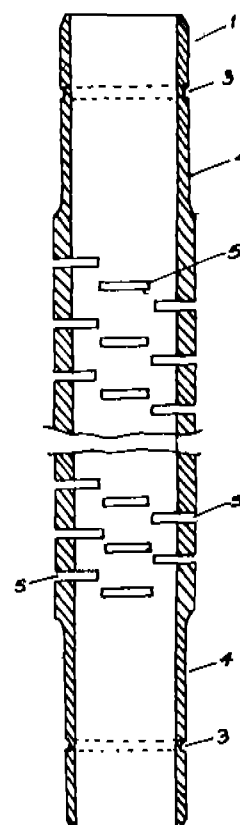


Fig. 2

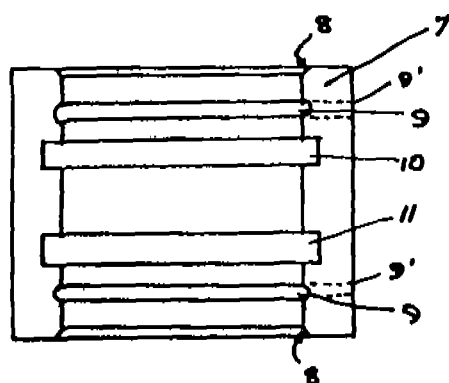


Fig. 3

Compl. Specn. 10 Pages.

Drgs. 2 Sheets.

CLASS : 136-C.

169035

Int. Cl. : B 29 c 47/00.

APPARATUS FOR AUTOMATIC CONTROL OF METERED FEED OF POLYMER FROM A FEED UNIT TO AN EXTRUDER.

Applicant : NAUCHNO-PROIZVODSTVENNOE OBIE-DINENIE "PLASTMASSY" OF MOSCOW, PEROVSKY PROEZO, 35, USSR.

Inventors : (1) ELIZAVETA IVANOVNA KALINCHEVA, (2) ANATOLY JURIEVICH MELNIKOV, (3) GARRI ISAKOVICH FAIDEL, (4) EVGENY ALEXANDROVICH RYABOV, (5) JURY IVANOVICH DROVETSKY, (6) IGOR NIKOLAEVICH VARNEK, (7) KONSTANTIN VENIAMINOVICH LIPETS, (8) VLADIMIR EGOROVICH GULEVSKY.

Application No. 423/Cal/1988, filed on 25th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

An apparatus for automatic control of metered feed of a polymer from a feed unit into an extruder comprising at least one vacuum shaft and at least one feeder screw associated with an electric drive, and having means for varying the output of the extruder in dependence on varying qualitative characteristics of the polymer fed to the extruder via the feed conduit, said means comprising a sensor of the level of the polymer in the vacuum shaft of the extruder, and positioned above the periphery of the feeder screw of the extruder, a control unit electrically connected with the level sensor, a voltage converter electrically connected with the control unit, and a member operable for varying the quantity of the polymer fed to the extruder via the feed conduit, electrically connected with the output of the voltage converter.

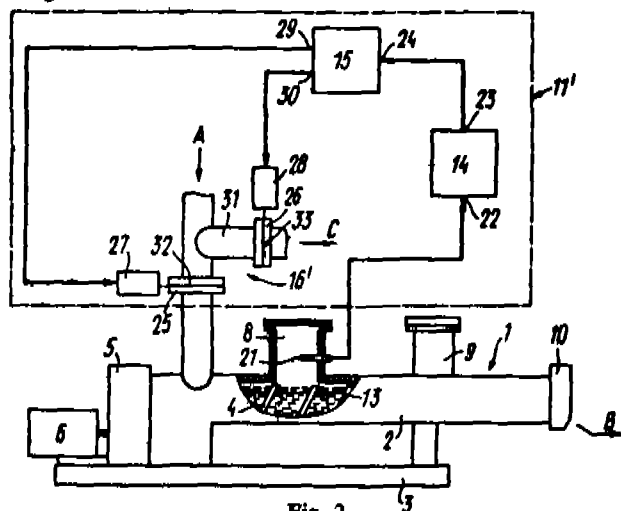


Fig. 2

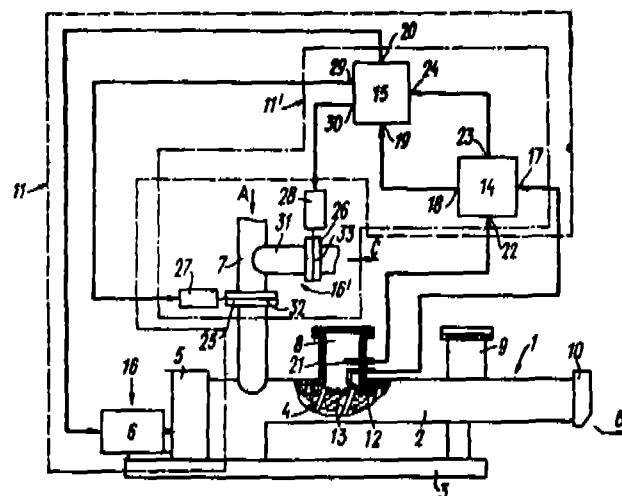


Fig. 3

Compl. Specn. 17 Pages.

Drgs. 3 Sheets.

CLASS : 157-Dc.

169036

Int. Cl. : B 61 b 1/00, E 01 b 25/00.

IMPROVED FIBRE REINFORCED CEMENT CONCRETE RAILWAY SLEEPERS.

Applicant & Inventor : DR. ANIL KRISHNA KAR, OF BC 192 SALT LAKE CITY, CALCUTTA-700 064, INDIA.

Application No. 488/Cal/1988, filed on 15th June, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

9 Claims

An improved fibre reinforced cement concrete railway sleeper having a top and bottom surface, the top surface being the rail receiving surface, the sleeper comprising reinforcement of rod/bars and/or fibres made of steel and/or other material having the requisite tensile strength, the fibres being distributed at random throughout the mass of the composite material of the concrete characterised in that said fibres of steel and/or other materials are concentrated in at least two locations near the bottom surface and being substantially under the rail receiving portion of the sleeper.

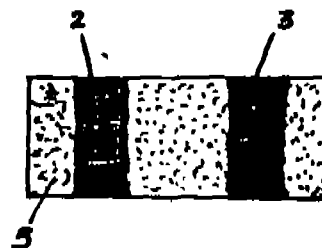


Fig. 2



Fig. 4

Compl. Specn. 14 Pages.

Drg. 1 Sheet.

CLASS : 151-G.
Int. Cl. : F 16 1 3/00.

169037

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

CONDUIT HANGER.

5 Claims

Applicant : ELECTROMETAL LTD., AT 3C, CAMAC STREET, 7TH FLOOR, CALCUTTA-700 016, WEST BENGAL, INDIA.

Inventor : HARI PRASAD BUDHIA.

Application No. 495/Cal/1988, filed on 16th June, 1988.

Complete Specification left on 7th April, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

A conduit hanger or hosepipe hanger comprising a pair of curved (2a, 2b) members adapted to hold a conduit or hose section in between the same, said pair of curved members being interconnected by an intermediate member (2c) such that the said pair of members remain resilient and separated from each other but facing each other, the free end (2a', 2b') of each of the said two curved members being provided with means (3a, 3b) adapted to engage the said free ends and held them in position and adapted to draw the free ends closed to each other or force the free ends to recede from one another.

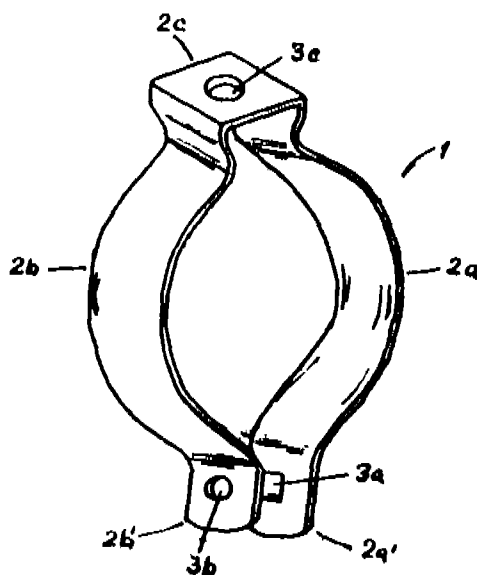


Fig. 1

Compl. Specn. 8 Pages.
Provl. Specn. 5 Pages.

Drq. NIL.
Drq. 1 Sheet.

CLASS : 129-G.
Int. Cl. : B 23 q 3/00.

169038

A ROTATIONALLY SYMMETRICAL TOOL ASSEMBLY.

Applicant : FRIED. KRUPP GESELLSCHAFT MIT BESCHRANKTER HAFTUNG, OF ALTENDORFER STRASSE 103, D-4300 ESSEN 1, FEDERAL REPUBLIC OF GERMANY.

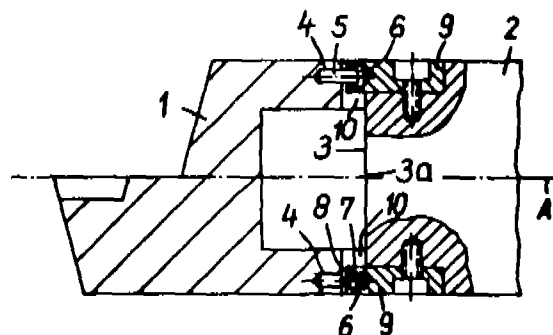
Inventor : RAINER VON HAAS.

Application No. 501/Cal/1988, filed on 20th June, 1988.

A rotationally symmetrical tool assembly having a rotary axis and including a first component constituted by a tool holder and having a first engagement face; a second component constituted by a tool head and having a second engagement face; said second component being removably attached to said first component such that said first and second engagement faces are in a contacting relationship with one another and are oriented perpendicularly to said rotary axis; a fitting bore provided in one of said components; said fitting bore and said guide bore being oriented towards one another; and a securing pin projecting from said fitting bore and extending into said guide bore for determining and maintaining a desired angular position of said second component relative to said first component; characterised in that

(a) at least one additional fitting bore is provided in said one of said components and at least one additional guide bore is provided in said other of said components, whereby the securing pin projecting from a selected one of said fitting bores is insertable to a selected one of said guide bores to provide for a selectable angular setting of said second component with respect to said first component; and

(b) a plug is inserted in each said guide bore other than the guide bore designated to receive said securing pin upon attaching said second component to said first component.



Compl. Specn. 10 Pages.

Drq. 1 Sheet.

CLASS : 40-F.
Int. Cl. : C 23 c 8/36.

169039

APPARATUS AND METHOD FOR DEPOSITION OF DIAMOND ON A SURFACE OF A SUBSTRATE.

Applicant : GENERAL ELECTRIC COMPANY, OF 1 RIVER ROAD, SCHENECTADY, NEW YORK 12345, U.S.A.

Inventors : (1) BAWA (NMN) SINGH, (2) YEHUDA (NMN) ARIE, (3) ORMOND ROY MESKER.

Application No. 507/Cal/1988, filed on 22nd June, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

An apparatus for deposition of diamond on a surface of a substrate, comprising :

(a) a reaction chamber;

(b) a self heating hot cathode within said reaction chamber, said cathode having a temperature of at least about 2000°C;

(c) means for heating said hot cathode;

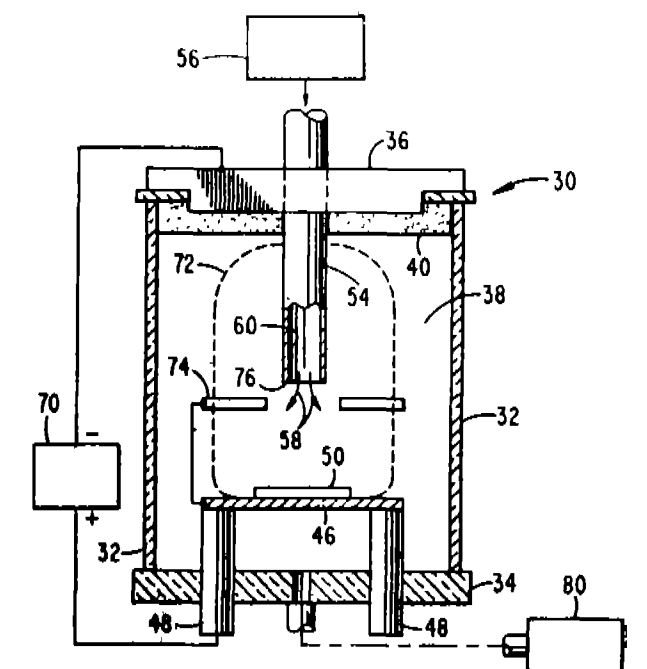
(d) an anode within said reaction chamber spaced from said hot cathode;

(e) means for effecting a flow carbonaceous reactant gas over a surface of said hot cathode; wherein heating and dissociation of said reactant gas occurs; and

(f) means for effecting an electric discharge between said cathode and said anode within said reaction chamber thereby forming a plasma wherein ionization and heating of said reactant gas occurs such that the gas is dissociated and ionized and thermionic emission of electrons occurs from the cathode surface and diamond is deposited on said surface of said substrate.

3 Claims

An electrolyzer for the purification of waste water, comprising a cylindrical casing of an electrically conducting material connected to a negative terminal of a power supply, a perforated cylindrical case accommodated in the casing containing a charge of electrically conducting particles connected by means of a current lead to the positive terminal of the power supply and having a means for imparting rotation thereto about its longitudinal axis of symmetry, a diaphragm of an insulating material disposed on the surface of the case, and pipes for supplying starting waste water to, and for discharging it from the electrolyzer after the treatment, characterised in that the case is freely placed within the casing in such a manner that its longitudinal axis of symmetry runs in parallel with the longitudinal axis of symmetry of the casing, the axis of symmetry of the casing extending at an angle smaller than 90° with respect to horizon.



Compl. Specn. 9 Pages.

Dr. 1 Sheet.

CLASS: 201-C.
Int. Cl.: C 02 f 1/46.

169040

ELECTROLYZER FOR THE PURIFICATION OF WASTE WATER.

Applicant: UKRAINSKY INSTITUT INZHENEROV VODNOGO KHOZYAISTVA, OF ROVNO, ULITSY LENINSKAYA, 11, USSR.

Inventors: (1) IGOR VIKTOROVICH MOSKALEV, (2) VLADIMIR MIKHAILOVICH ROGOV, (3) VIKTOR LEONIDOVICH FILIPCHUK, (4) DMITRY NIKOLAEVICH PLASTUNOV.

Application No. 532/Cal/1988, filed on 28th June, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

2—G—207 GI/91

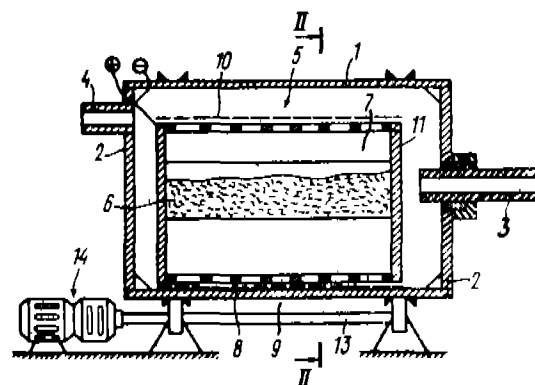


Fig. 1

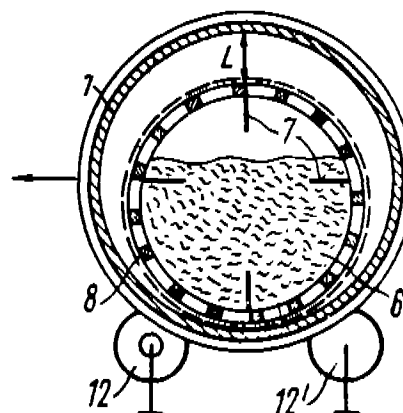


Fig. 2

Compl. Specn. 13 Pages.

Dr. 2 Sheets.

CLASS: 35-E.
Int. Cl.: C 04 b 35/00.

169041

A METHOD FOR PRODUCING A SELF-SUPPORTING CERAMIC COMPOSITE COMPRISING METAL CARBIDE.

Applicant: LANXIDE TECHNOLOGY COMPANY, LP, TRALEE INDUSTRIAL PARK, NEWARK DELAWARE 19711, U.S.A.

Inventors: (1) ADAM JAN GESING, (2) EDWARD STANLEY LUCE, (3) NARASIMHA SRINIVASA RAGHVAN, (4) DANNY RAY WHITE.

Application No. 9/Cal/1988, filed on 4th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

12 Claims

A method for producing a self-supporting ceramic composite comprising metal carbide which method comprises :

(a) establishing in a substantially inert atmosphere a body of molten parent metal comprising a metal selected from the group consisting of titanium, hafnium and zirconium in surface contact with a permeable mass comprising (i) a filler selected from at least one Group IVB metal carbide or another relative inert filler or mixtures thereof as hereinbefore defined, and (ii) a carbon source such as elemental carbon or a metal carbide reducible by said parent metal as hereinbefore defined, for reaction with said molten metal to form a carbide of the molten metal, the carbon moiety of said carbon source being present in no more than a stoichiometric amount;

(b) maintaining said surface contact for a time sufficient to effect infiltration of molten parent metal into said permeable mass and to permit reaction of said molten parent metal with said carbon source to form corresponding parent metal carbide; and

(c) continuing said infiltration and reaction for a time sufficient to at least substantially complete said reaction and to thereby produce said self-supporting ceramic composite, and wherein said filler material is substantially inert to the molten parent metal or metal carbide formed under the process conditions.

Compl. Specn. 20 Pages.

Drg. 1 Sheet.

CLASS : 35-E.

169042

Int. Cl. : C 04 b 35/00.

A METHOD OF PRODUCING SELF SUPPORTING CERAMIC COMPOSITE.

Applicant : LANXIDE TECHNOLOGY COMPANY, LP;
TRALEE INDUSTRIAL PARK, NEWARK, DELAWARE 19711,
U.S.A.

Inventors : (1) JACK ANDREW KUSZYK, (2) CHRISTOPHER ROBIN KENNEDY.

Application No. 10/Cal/1988, filed on 4th January, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

14 Claims

A method for producing a self-supporting ceramic composite comprising (1) a ceramic matrix obtained by oxidation of a parent metal comprising an aluminium alloy to form a polycrystalline material comprising an oxidation reaction product formed upon reaction of the parent metal with one or more solid, liquid or gaseous oxidants as herein described and (2) one or more fillers as herein before described preferably comprising ceramic or reflectory material embedded by the matrix which method comprises :

(a) positioning a parent metal, comprising an aluminium alloy having at least about 1% by weight zinc with or without a dopant material adjacent to a permeable mass of filler having at least one defined surface boundary, and placing said

parent metal and said filler adjacent to each other so that formation of said oxidation reaction product as hereinbefore described of the parent metal with an oxidant as hereinbefore described will occur into said mass of filler and in a direction towards said defined surface boundary;

(b) heating said parent metal to a first temperature about its melting point but below the melting point of said oxidation reaction product to form a body of molten parent metal and reacting the molten-parent metal with said oxidant at said first temperature to form said oxidation reaction product, and at said first temperature, maintaining at least a portion of said oxidation reaction product in contact with and extending between said body of molten metal and said oxidant to draw molten metal through the oxidation reaction product towards the oxidant and towards and into the adjacent mass of filler so that oxidation reaction product continues to form within the mass of filler at the interface between the oxidant and previously formed oxidation reaction product, and continuing said reaction for a time sufficient to infiltrate said mass of filler to said defined surface boundary with a ceramic matrix also containing residual non-oxidized metallic constituents of said parent metal; and

(c) heating the resulting infiltrated mass of step (b) in either an oxygen-containing atmosphere, an inert atmosphere or in vacuo to a second temperature above the said first temperature but below the melting point of the oxidation reaction product in order to remove or oxidize at least a substantial portion of said residual non-oxidized metallic constituents from or in said infiltrated mass without substantial formation of said oxidation reaction product beyond said defined surface boundary, producing a self-supporting ceramic composite.

Compl. Specn. 28 Pages.

Drg. 1 Sheet.

CLASS : 9-D, 103, 108.

169043

Int. Cl. : C 23 c 4/00.

A PROCESS FOR THE MANUFACTURE OF AN OXIDATION AND HOT CORROSION-RESISTANT COMPOSITE ARTICLE.

Applicant : GENERAL ELECTRIC COMPANY, OF 1 RIVER ROAD, SCHENECTADY 5, NEW YORK, U.S.A.

Inventor : MARVIN FISHMAN.

Application No. 83/Cal/1988, filed on 1st February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

7 Claims

A process for the manufacture of oxidation and hot corrosion-resistant composite article comprising depositing in a conventional manner on the surface of an industrial article such as turbine section a protective layer of nickel-base superalloy consisting essentially of 30—44% chromium, 5—10% hafnium, 0.5—4% silicon, 0.1—1% yttrium, 0.3—3% titanium, upto 11% cobalt, remainder nickel.

Compl. Specn. 15 Pages.

Drgs. 8 Sheets.

CLASS : 206-E.

169044

Int. Cl. : H 04 b 11/00.

SYSTEM FOR TRANSMISSION AND RECEPTION OF REMOTE CONTROL SIGNALS.

Applicant : NAUCHNO-PROIZVODSTVENNOE OBIEDINENIE PO SOZDANIJU I VYPUSKU SREDSTV AVTOMATIZATSII GORNYKH MASHIN, OF DONETSK, PROSPEKT ILIICHA, 93, USSR.

Inventors : (1) VALERY ALEXANDROVICH KNONOV, (2) VLADIMIR SEMENOVICH ALEKHIN, (3) LEV ABRAMOVICH MUFEL.

Application No. 101/Cal/1988, filed on 5th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

1 Claim

A system for transmission and reception of remote control signals comprising a portable control desk used for conversion of information on the position of the control mechanisms into a control signal and for transmission of this signal to the controlled object, and the

following elements adapted for mounting on the controlled object : a control signal receiver, a timing pulse selector whose input is connected to the output of the control signal receiver, a pulse generator, a pulse distributor whose zero setting input is connected to the output of the timing pulse selector and to the zero setting input of the pulse generator whose output is connected to the clock input of the pulse distributor, a unit of actuating elements whose outputs are connected to the control circuits of the controlled object, a register unit whose timing inputs are electrically connected to the output of the pulse distributor, the outputs are connected to the inputs of the unit of actuating elements while the data input of said register unit is connected to the output of the control signal receiver, is characterised by a pulse counter whose zero setting input is connected to the output of the timing pulse selector while the data input of said register unit is connected to the output of the control signal receiver, is characterised by a pulse counter whose zero setting input is connected to the output of the timing pulse selector while the complementing input is connected to one of the outputs of the pulse distributor, a delay element whose input is connected to the output of the pulse counter while the output is connected to the zero setting input of the register unit, a signalling unit whose input is connected to the output of the pulse counter, a switching unit whose inputs are connected to the outputs of the pulse distributor while the outputs of the pulse distributor while the outputs are connected to the respective timing inputs of the register unit; the control input of the switching unit is connected to the output of the pulse counter.

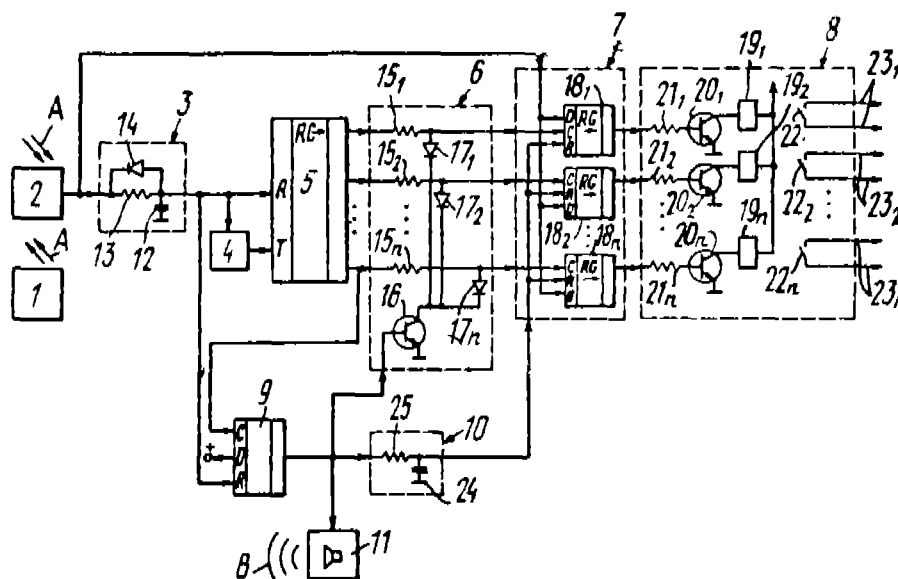


Fig. 1

Compl. Specn. 15 Pages.

Drgs. 3 Sheets.

CLASS : 40-F.

169045

Int. Cl. : B 01 j 19/00.

DEVICE FOR MEASURING RATE OF OXYGEN CONSUMPTION BY MICROORGANISMS IN LIQUID MEDIA.

Applicant : KAUNASSKY POLITEKHNICHESKY INSTITUT IMENI ANTANASA SNECHKUSA, OF ULITS A DONELAI-CHIO, 73, KAUNAS, USSR.

Inventors : (1) VITAUTAS ANTANOVICH ZHALKAUSKAS, (2) JURGIS-KAZIMERAS JURGEVICH STANISHKIS, (3) DONATAS EDUARDOVICH BYARULIS, (4) MINDAUGAS

VASTSLOVOVICH KONDRATAVICHJUS, (5) RIMVIDAS JUOZOVICH SIMUTIS.

Application No. 102/Cal/1988, filed on 5th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

2 Claims

A device for measuring rate of oxygen consumption by microorganisms in liquid media comprising a flow-through chamber, a pump for pumping a liquid cultural medium through the chamber,

said pump provided with a pumping-rate presetter, electrochemical sensors of partial pressure of oxygen mounted each at the inlet and outlet of the chamber, a subtraction means connected to said sensors for determining the difference between the output of said sensors, a calculating means connected to said subtraction means for calculation of the rate of oxygen consumption by microorganisms, characterised in that said sensors for determination of partial pressure of oxygen are made as a single assembly comprising a housing with opening provided in two opposite walls thereof and closed with semipermeable membranes which is filled with an electrolyte; two cathodes located in the housing each close to the respective membrane; an anode located in the housing; leads from the cathodes and the anode which are outputs of sensors; the inner space of the housing communicates with the inner space of the flow-through chamber by means of semipermeable membranes, one of said membranes being disposed in the vicinity of the inlet of the flow-through chamber, the other of said membrane being in the vicinity of the outlet of said chamber.

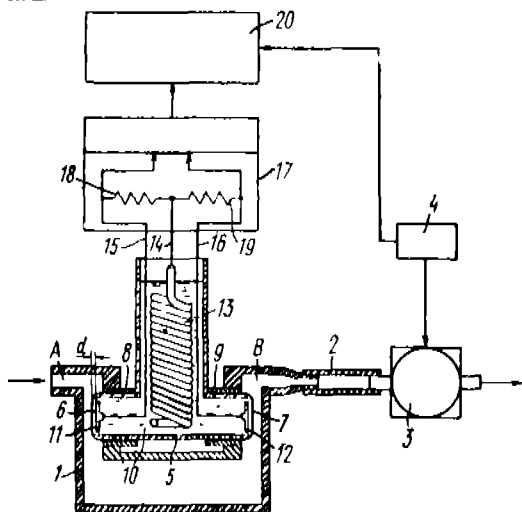


Fig. 1

Compl. Specn. 14 Pages.

Drgs. 2 Sheets.

CLASS : 40-F.

169046

Int. Cl. : B23 K 9/00.

AN IMPROVED METHOD OF PLASMA-ARC TREATMENT OF MATERIALS PREFERABLY BUT NOT EXCLUSIVELY FOR USE IN MACHINE BUILDING.

Applicants : (1) GOSUDARSTVENNY PROEKTNY I NAUCHNO-ISSEDOVATELSKY INSTITUT NIKELEVO-KOBALTOVOI PROMYSHLENNOSTI (GIPRONIKEL) OF LENINGRAD, NEVSKY PROSPEKT, 30, USSR; (2) VSESOUJZNY NAUCHNO ISSEDOVATELSKY I PROEKTNO-TEKHNOLOGICHESKY INSTITUT UGOLNOGO MASHINOSTROENIA "VNIPTUGLEMASH" OF ULITSA PETRA ROMANOVA, 7, MOSCOW, USSR.

Inventors : (1) MIKHAIL GERSHENOVICH FRIDLYAND, (2) VALERY ALEXANDROVICH PERSHIN (3) ALEXANDR PETROVICH, (4) STANISLAV ALEXEEVICH VAKHALIN.

Application No. 126/Cal/1988, filed on 12th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

1 Claim

An improved method of plasma-arc treatment of materials preferably but not exclusively used for use in machine building wherein a plasma-forming mixture comprising hydrocarbons as herein described and an oxidizer is introduced into the arc gap of an electric-arc device characterized in that the said oxidizer comprises a mixture of carbon dioxide and air with the following content thereof in percentage by volume

Carbon dioxide	50 to 90
air	50 to 10

Compl. Specn. 13 Pages.

Drg. 1 Sheet.

CLASS : 193

169047

Int. Cl. : F 23 G, 5/44;

F 23 M, 13/00

AXIAL SEAL SYSTEM FOR ROTARY COMBUSTOR

Applicant : WESTINGHOUSE ELECTRIC CORPORATION OF WESTINGHOUSE BUILDING, GATEWAY CENTER, PITTSBURGH, PENNSYLVANIA 15222, UNITED STATES OF AMERICA.

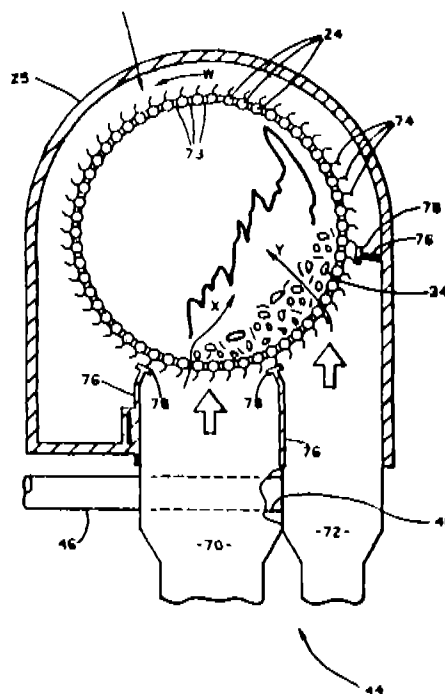
Inventor : EDWARD SAMERA, JR.

Application No. 133/Cal/1988, filed on 15th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

5 Claims

An axial seal system for a rotary combustor having a rotary cylindrical drum (22), a plurality of passages for providing combustion fluid to arcuate portions along the outer periphery of said rotatable cylindrical drum (22), a plurality of resilient seal strips (84) disposed axially at regular arcuate intervals along the outer periphery of the rotatable cylindrical drum (10), and a plurality of axial seal members (90) so disposed that when two of said axial seal members (90) each contact a respective seal strip (84) a seal is formed at the juncture of one of said passages and the cylindrical drum (22) for providing combustion fluid to an arcuate portion of the periphery of said rotatable cylindrical drum (22) for providing combustion fluid to an arcuate portion of the periphery of said rotatable cylindrical drum (22) characterized in that each of said axial seal members (90) comprises a movable shoe (112) portion which extends axially along the length of the rotatable drum (22), means (94) for biasing each movable shoe (112) into engagement with a first of said seal strips (84) and for adjusting the contact force therebetween; the width of each movable shoe (112) and the interval between said seal strips (84) being such that a second seal strip (84) contacts each movable shoe (112) to form a seal therebetween before the first strip (84) leaves the shoe (112) as the cylindrical drum (22) rotates to provide an axial seal which is easily adjusted and replaced.



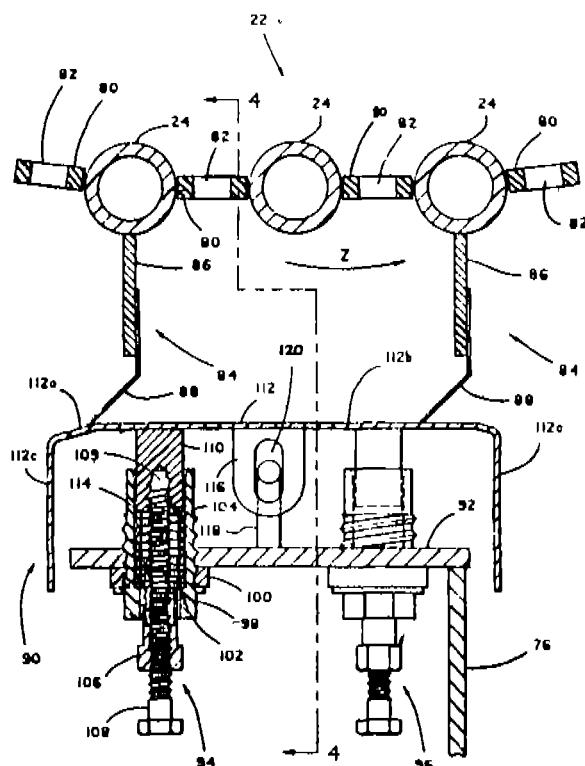


Fig. 3

Compl. Specn. 15 Pages.

Drgs. 5 Sheets.

CLASS : 94-F.

169048

Int. Cl. : B 02 C 4/00, 23/00.

COAL PULVERIZER INERTING AND FIRE EXTINGUISHING SYSTEM IN A BOWL MILL FOR PULVERISING COAL.

Applicant : COMBUSTION ENGINEERING, INC., OF 1000 POOSPECT HILL ROAD, WINDSOR, CONNECTICUT, UNITED STATES OF AMERICA.

Inventors : (1) STANLEY EDWARD KMIOTEK, (2) MARK PAUL JOHNSON (3) JAMES DANIEL ROGERS.

Application No. 136/Cal/1988, filed on 15th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

13 Claims

In a bowl mill having a substantially closed separator body, a rotatable grinding surface mounted for rotation in a first direction within the separator body and upon which pulverization of material is effected, material supply means supported within the separator body for supplying material to be pulverized to the grinding surface, outlet means supported on the separator body for discharging from the bowl mill material that has been pulverized therewithin, and air inlet means for supplying air to the interior of the separator body for transporting material that has been pulverized on the grinding surface therefrom to the outlet means for discharging from the bowl mill, the improvement of a combination inerting and fire extinguishing system comprising :

- (a) an inerting subsystem operative for establishing an inert atmosphere within the separator body as well as for clearing material from the bowl mill, said inerting subsystem including inerting inlet means suitably positioned on the bowl mill so as to be operative for supplying an inerting medium into the interior of the bowl mill, an inerting medium supply means connected in fluid flow relation to said inerting inlet means and operative for supplying an inerting medium to said inerting inlet means and therethrough into the interior of the bowl mill, a no material flow detection means suitably mounted on the material supply means so as to be operative to detect the absence of material flow in the material supply means and to provide a signal indicative of such a lack of material flow in the material supply means, a receiving means connected in circuit relation with said no material flow detection means for receiving therefrom the signal generated thereby, and control means connected in fluid flow relation with said inerting medium supply means so as to be operative for initiating the flow of the inerting medium to said inerting inlet means and therethrough into the interior of the bowl mill when a lack of material flow in the material supply means is detected by said no material flow detection means; and
- (b) a fire extinguishing sub-system operative for effectuating a reduction in temperature, said fire extinguishing subsystem comprising temperature detecting means for detecting the temperature of the bowl mill at suitable locations and means for supplying a fire extinguishing medium into the interior of the bowl mill.

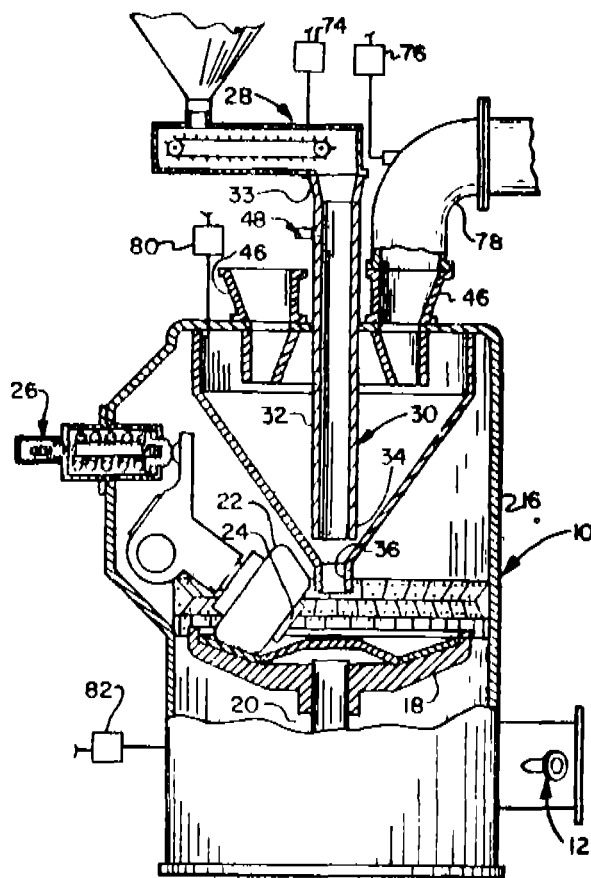


Fig. 1

Compl. Specn. 43 Pages.

Drgs. 5 Sheets.

CLASS : 10-B C.
Int. Cl. : F 42 B 3/00.

169049

Applicant : TOIMINIMI KONE-SAMPO; ISO-HIISI, 14200
TURENKI, FINLAND

Inventor : MATTI SAMPO

Application No. 162/Cal/1988, filed on 24th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972), Patent Office, Calcutta.

7 Claims

A power generating aggregate, comprising a body, an internal combustion engine having at least one engine cylinder mounted on the body, a reciprocating engine piston in the engine cylinder, a piston rod fastened to said engine piston to be reciprocated therewith, and a power output unit, comprising at least three separate pump cylinders and at least three separate pump piston which are fixed to said piston rod, each pump cylinder being provided with hydraulic fluid intake and pressure ducts which connect said pump cylinders to a drive motor or an actuator cylinder, characterised in that at least two of said pump cylinders have different diameters and the pressure ducts of said at least two pump cylinders each have control value means for separately controlling the outputs of said at least two pump cylinders.

DETONATOR.

Applicant : NITRO NOBEL AB. OF S-710 30 GYTTRORP,
SWEDEN.

Inventors : (1) SVEN DAHMBERG, (2) ELOF JONSSON, (3)
PER LILIUS, (4) INGEMAR OLSSON, (5) HJALMAR HESSEL-
BOM (6) ROLF WENNERGREN.

Application No. 140/Cal/1988, filed on 16th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972), Patent Office, Calcutta.

22 Claims

A firing unit for initiation of detonators, which contain at least
one base charge in a detonator casing, which firing unit comprises

an electrically actuatable fuse head.

a current source connected to the electrically actuatable fuse head
via a connecting arrangement, and an electronics unit comprising

a signal decoder designed so as to distinguish a start signal supplied
to the detonator via an outer signalling line,

a delay circuit designed in such a way that, when the start signal is
received, it delivers an ignition signal after a predetermined time and

the connecting arrangement, which is designed in such a way that,
when the ignition signal is received, it connects the current
source to the fuse head in order to electrically activate the latter.

the electronics unit comprising at least one chip made from a
semiconductor material and having a microcircuit,

characterized in that

at least the chip(s) and an additional electrical component or
external signal conductor(s) are electrically and mechanically connected
to each other on a substrate having a circuit pattern.

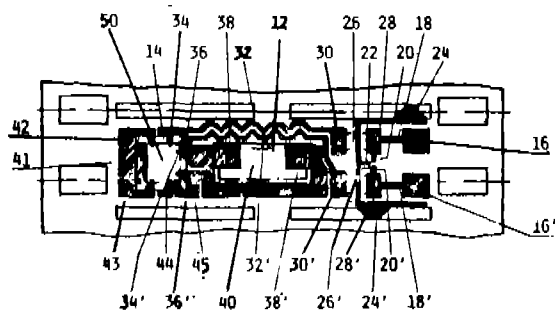


Fig. 2

Compl. Specn. 43 Pages.

Draws. 2 Sheets.

CLASS : 107 G [XLVI(2)]
Int. Cl. : F 15 B, 15/00, 15/18.

169050

"A POWER GENERATING AGGREGATE."

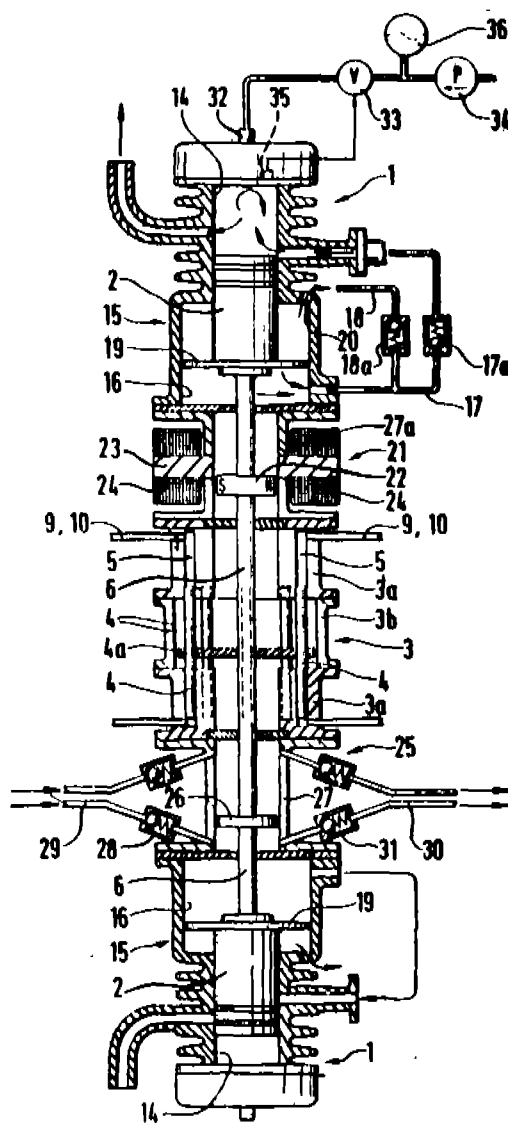


Fig. 1

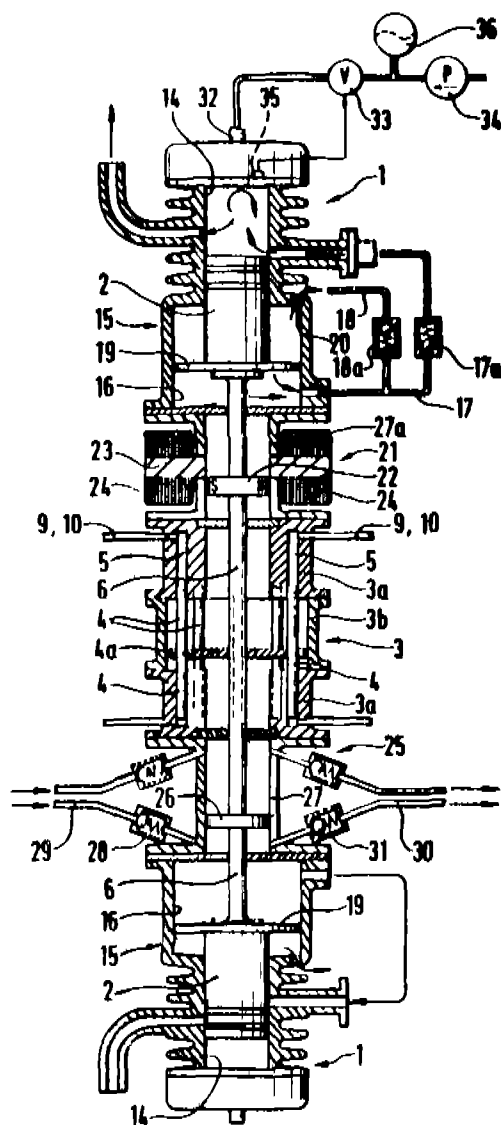


Fig. 1

Compl. Specn. 13 Pages.

Drgs. 2 Sheets.

CLASS : 169-C
Int. Cl. : F 41 G 11/00.

169051

COLLIMATING MARK DEVICE.

Applicant : B. V. OPTISCHE INDUSTRIE "DE OUDE DELET" OF VAN MIERVELT LAAN 9, 2612 XE DEIFT, THE NETHERLANDS.

Inventor : NICOLAAS PETER ELSHOUD.

Application No. 361/Cal/1988, filed on 3rd May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

23 Claims

Collimating mark device provided with an infrared collimating mark intended to be observed through a sight, characterized in that the collimating mark device is provided with means to generate at

least two essentially V-shaped intensity distributing the points of the V-shapes facing each other, said V-shaped intensity distributions constituting the infrared collimating mark.

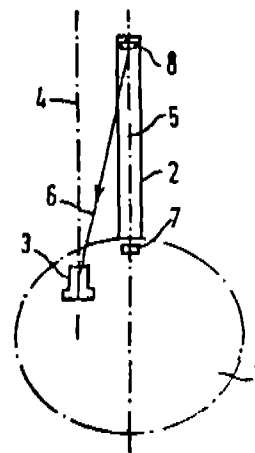


Fig. 1

Compl. Specn. 19 Pages.

Drgs. 2 Sheets.

CLASS : 32-F₃₀
Int. Cl. : C 07 C 143/04.

169052

A METHOD FOR PREPARING A (C₁-C₆) ALKANEDI-SULFONIC ACID.

Applicant : PENN WALT CORPORATION OF PENN WALT BUILDING, THREE PARKWAY, PHILADELPHIA, PENNSYLVANIA 19102, UNITED STATES OF AMERICA.

Inventor : STANLEY ROBERT SANDLER.

Application No. 398/Cal/1988, filed on 17th May, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

11 Claims

A method for preparing a (C₁-C₆) alkanedisulfonic acid comprising reacting chlorosulfonic acid with a C₁-C₆ alkanesulfonic acid in the presence of oxygen at substantially anhydrous condition and at substantially atmospheric pressure and if desired, separating in a conventional manner the alkanedisulfonic acid from the product mixture, said reaction being optionally carried out in the presence of a carbonaceous cocatalyst.

Compl. Specn. 14 Pages.

Drg. NIL.

CLASS : 168; 206_C & B.
Int. Cl. : G 06 C 9/00.

169053

H 04 L 1/00, 5/00, 17/00.
G 06 F 13/00, 15/00.

CONTENTION CONTROL SYSTEM.

Applicant : OKI ELECTRIC INDUSTRY CO. LTD. OF 7-12 TORANOMON 1-CHOME, MINATO-KU, TOKYO, JAPAN.

Inventors : (1) EIZO TOMITA, (2) YUTAKA ASAI.

Application No. 540/Cal/1988, filed on 1st July, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

4 Claims

A contention control system for a single communication medium shared by a plurality of independent functional modules comprising driving means coupled to a control line separate from said communication medium for activating said control line for a predetermined contention interval,

receiver means coupled to said control line, for detecting whether said control line is active or inactive, timing

means for determining the length of said contention interval, and

a control unit connected to said driving means, said receiver means, and said timing means for receiving a signal from said receiver means indicating whether said control line is inactive, said driving means being adapted to turn on when said control line is found inactive, said driving means being adapted to be turned on at the end of said contention interval as determined by said timing means and said driving means being also adapted to turn on and off at the beginning and end of data transmission.

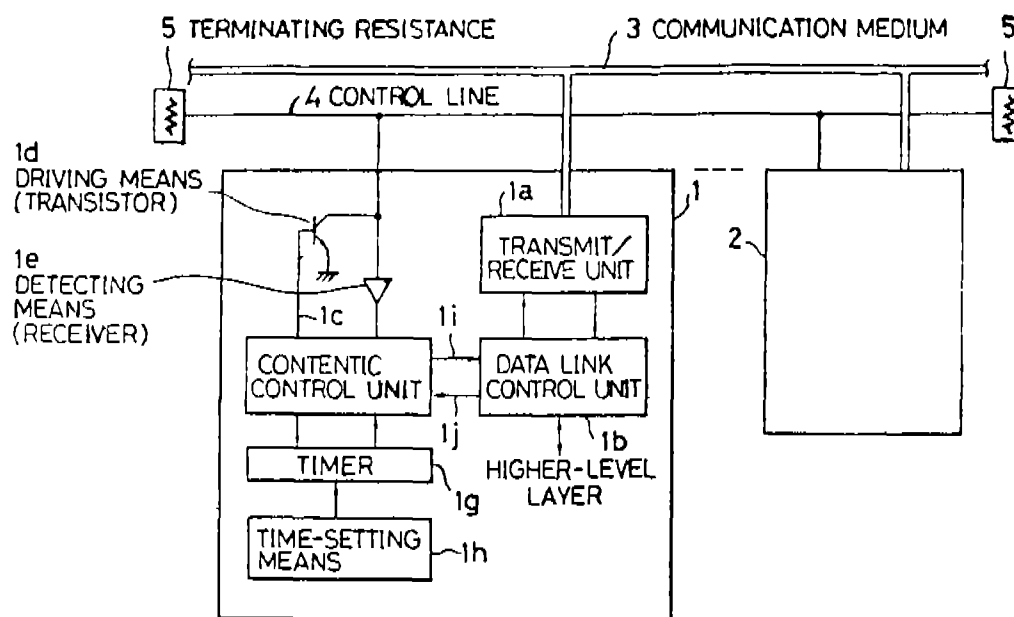


Fig 5

Compl Specn 14 Pages

Drgs 7 Sheets

CLASS 17:
Int Cl G 02 C 7/04

169054

CLASS 108 C:
Int Cl C 21 C 1/02, 1/08

169055

CONTACT LENS OF SOFT, PLIABLE OPHTHALMIC PLASTIC MATERIAL

Applicant & Inventor CYRIL HAROLD EVANS OF 23, BURDOCK LANE, DON MILLS ONTARIO M3C 2G6, CANADA.

Application No 619/Cal/1988, filed on 26th July, 1988

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

8 Claims

A contact lens of soft, pliable ophthalmic plastic material, said lens when in its dehydrated state having a spherical back surface which in its hydrated state conforms to the corneal curvature of the wearer's eye characterized in that when said lens being in its dehydrated state, having an aspheric front surface of polar coordinate form having an asphericity which is a function $(n) [\sin(a)]$ where (a) is the polar angle and (n) is the offset factor of a controlling circular surface

Compl Specn 19 Pages.

Drgs 2 Sheets

A COMPOSITE DEVICE FOR THE TREATMENT OF METAL BATHS

Applicant AFFIVAL, OF 7 PLACE DU CHANCELIER ADENAUER 75016 PARIS, FRANCE

Inventor MICHEL DOUCHY

Application No 51/Cal/1988, filed on 21st January, 1988

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta

8 Claims

A composite device with a metal tubular casing of substantial length within which are housed the material or materials in powder or granular form used for the treatment of metal baths into which said composite device is introduced, the device comprising

an axial zone containing at least one first material in powder or granular form,

a tubular metal intermediate wall, surrounding said first material, and

CLASS : 32-A1.

169058

Int. Cl. : C 09 b 43/00.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE AZO COMPOUNDS.

Applicant : HOECHST AKTIENGESellschaft, D-6230 FRANKFURT AM MAIN 80, FEDERAL REPUBLIC OF GERMANY.

Inventors : (1) MARCOS SEGAL, (2) MICHAEL KUNZE.

Application No. 649/Cal/1988, filed on 2nd August, 1988

[Divisional of Appln. No 210/Cal/1986 Ante-dated to March 17, 1986].

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

15 Claims

A process for preparing a water-soluble azo compound conforming to the general formula (1) of the accompanying drawings.



Formula (1)

in which the symbols have the following meanings :

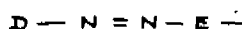
A is a phenyl group which may be substituted by substituents selected from the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, alkylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, phenylamino, sulfophenylamino, carbamoyl, sulfamoyl, N—(C¹—C⁴—alkyl)—carbamoyl, N, N—di—(C¹—C⁴—alkyl)—carbamoyl, N—(C¹—C⁴—alkyl)—sulfamoyl, N, N—di—(C¹—C⁴—alkyl)—sulfamoyl, N—phenyl—sulfamoyl, N—phenyl—N—(C¹—C⁴—alkyl)—sulfamoyl, cyano, nitro, chlorine, bromine, fluorine, trifluoromethyl, hydroxy and sulfo

or

A is a naphthyl group which may be substituted by 1, 2 or 3 substituents selected from the group of substituents consisting of sulfo, carboxy, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, chlorine, hydroxy and nitro,

or

A is radical of the general formula (2)



Formula (2)

in which

D is a phenyl group which may be substituted by substituents selected from the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, phenylamino, sulfophenylamino, carbamoyl, sulfamoyl, N—(C¹—C⁴—alkyl)—carbamoyl, N, N—di—(C¹—C⁴—alkyl)—carbamoyl, N—(C¹—C⁴—alkyl)—sulfamoyl, N, N—di—(C¹—C⁴—alkyl)—sulfamoyl, N—phenyl—sulfamoyl, N—phenyl—N—(C¹—

C⁴—alkyl) sulfamoyl, cyano, nitro, chlorine, bromine, fluorine, trifluoromethyl, hydroxy and sulfo

or

D is a naphthyl group which may be substituted by 1, 2 or 3 substituents selected from the group of substituents consisting of sulfo, carboxy, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, chlorine, hydroxy and nitro

E is the radical of a couplable and diazotizable compound which in the synthesis of compounds (1) serves first as a coupling component and then as a diazo component and represents a phenylene radical which may be substituted by 1 or 2 substituents which are selected from the set consisting of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms which may be substituted, 1 benzoylamino, 2 sulfo, 1 carboxy, 1 N, N—dialkylamino having alkyl groups of 1 to 4 carbon atoms each, 1 ureido, 1 phenylureido and 1 alkylsulfonylamino of 1 to 4 carbon atoms, or denotes a naphthylene radical which may be substituted by 1 or 2 sulfo groups or by an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group or by 1 or 2 sulfo groups and by an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group,

or represents a naphthylene radical which contains bonded in the ortho-position relative to the azo group of the radical of the formula (2) an amino group, an alkanoylamino group of 1 to 4 carbon atoms or an optionally substituted phenylamino group or a hydroxy group, and which may additionally be substituted by 1 or 2 sulfo groups or an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or an optionally substituted benzoylamino additionally by 1 or 2 sulfo groups and an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or an optionally substituted benzoylamino group;

K is a 1-hydroxynaphthylene radical which contains the azo group bonded in the 2-position, or is a 2-hydroxynaphthylene radical which contains the azo group bonded in the 1-position, which may both be substituted by 1 or 2 sulfo groups or by an optionally substituted alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group or by an optionally substituted alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group and 1 or 2 sulfo groups, or

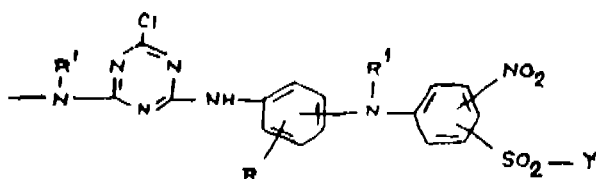
K is a naphthylene radical which may be substituted by 1 or 2 sulfo groups or may be substituted by 1 or 2 sulfo groups and an optionally monosubstituted or disubstituted amino group, the substituents on the amino groups belonging to the group of substituents consisting of : alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radical of 1 to 4 carbon atoms (in which the phenyl radical may be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, sulfo and/or carboxy), phenyl

and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, chlorine, carboxy and/or sulfo, or

K is a 1-aminonaphthylene radical which contains the azo group bonded in the 2-position, or is a 2-amino-naphthylene radical which contains the azo group bonded in the 1-position, where both the aminonaphthylene radicals may be substituted by 1 or 2 sulfo groups or by a hydroxy group in the 5-, 6-, 7- or 8-position or by this hydroxy group and 1 or 2 sulfo groups, or

K is a phenylene radical which may be substituted by 1 or 2 substituents from the group of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms which may be substituted, 1 benzoylamino, 1 sulfo, 1 carboxy, 1 ureido, 1 phenylureido, 1 alkylsulfonylamino of 1 to 4 carbon atoms, 1 amino and 1 monosubstituted or disubstituted amino whose substituents are alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radical of 1 to 4 carbon atoms (whose phenyl radical can be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, carboxy and/or sulfo), phenyl and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, chlorine and/or sulfo;

Z is a radical of the general formula (3) in which



Formula (3)

R¹ stands for a hydrogen atom or an optionally substituted alkyl group of 1 to 4 carbon atoms, where the two R's can be identical to or different from each other.

R denotes a hydrogen atom or a sulfo group and

Y is the vinyl group or a β -thiosulfatoethyl group, which comprises reacting a compound of the general formula (7) where A, K and R¹ have the meanings mentioned above, with an aminodiphenylamine compound of the general formula (8) in which R¹, R and Y have the meanings mentioned in Claim 1, by elimination of 1 mole of hydrogen chloride, the reaction being effected at a temperature between 0 and 50°C and at a pH value between 3 and 7.

Compl. Specn. 56 Pages.

Drgs. 5 Sheets.

CLASS : 32-A1.

169059

Int. Cl. : C 09 b 43/00.

PROCESS FOR THE PREPARATION OF WATER-SOLUBLE AZO COMPOUNDS.

Applicant : HOECHST AKTIENGESellschaft, D-6230 FRANKFURT AM MAIN 80, F. R. GERMANY.

Inventors : (1) MARCOS SEGAL, (2) MICHAEL KUNZE.

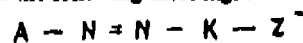
Application No. 650/Cal/1988, filed on 2nd August, 1988.

[Divisional of Appln. No. 210/Cal/1986, Ante-dated to March 17, 1986].

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Calcutta.

11 Claims

A process for preparing a water-soluble azo compound conforming to the general formula (1) of the accompanying drawing in which the symbols have the following meanings :



Formula (1)

A is a phenyl group which may be substituted by substituents selected from the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, alkylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine sulfo, sulfato, carboxy and hydroxy, benzoylamino, phenylamino, sulfophenylamino, carbamoyl, sulfamoyl, N-(C¹-C⁴-alkyl)-carbamoyl, N, N-di-(C¹-C⁴-alkyl)-carbamoyl, N-(C¹-C⁴-alkyl)-sulfamoyl, N, N-di-(C¹-C⁴-alkyl)-sulfamoyl, N-phenyl-sulfamoyl, N-phenyl-N-(C¹-C⁴-alkyl)-sulfamoyl, cyano, nitro, chlorine, bromine, fluorine, trifluoromethyl, hydroxy and sulfo, or

A is a naphthyl group which may be substituted by 1, 2 or 3 substituents selected from the group of substituents consisting of sulfo, carboxy, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, chlorine, hydroxy and nitro, or

A is a group of the formula



in which

D is a phenyl group which may be substituted by substituents selected from the group of substituents consisting of alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, phenylamino, sulfophenylamino, carbamoyl, sulfamoyl, N-(C¹-C⁴-alkyl)-carbamoyl, N, N-di-(C¹-C⁴-alkyl)-carbamoyl, N-(C¹-C⁴-alkyl)-sulfamoyl, N, N-di-(C¹-C⁴-alkyl)-sulfamoyl, N-phenyl-sulfamoyl, N-phenyl-N-(C¹-C⁴-alkyl)-sulfamoyl, cyano, nitro, chlorine, bromine, fluorine, trifluoromethyl, hydroxy and sulfo, or

D is a naphthyl group which may be substituted by 1, 2 or 3 substituents selected from the group of substituents consisting of sulfo, carboxy, methyl, ethyl, methoxy, ethoxy, alkanoylamino of 2 to 5 carbon atoms unsubstituted or substituted by substituents

selected from chlorine, bromine, sulfo, sulfato, carboxy and hydroxy, benzoylamino, chlorine, hydroxy and nitro,

E is the radical of a couplable and diazotizable compound which in the synthesis of compounds (1) serves first as a coupling component and then as a diazo component and represents a phenylene radical which may be substituted by 1 or 2 substituents which are selected from the set consisting of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms which may be substituted, 1 benzoylamino, 2 sulfo, 1 carboxy, 1 N, N-dialkylamino having alkyl groups of 1 to 4 carbon atoms each, 1 ureido, 1 phenylureido and 1 alkylsulfonylamino of 1 to 4 carbon atoms, or denotes a naphthylene radical which may be substituted by 1 or 2 sulfo groups or by an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group or by 1 or 2 sulfo groups and by an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group,

or represents a naphthylene radical which contains bonded in the ortho-position relative to the azo group of the radical of the formula (2) an amino group, an alkanoylamino group of 1 to 4 carbon atoms or an optionally substituted phenylamino group or a hydroxy group, and which may additionally be substituted by 1 or 2 sulfo groups or an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or an optionally substituted benzoylamino group or by 1 or 2 sulfo groups and an alkyl group of 1 to 4 carbon atoms, a nitro group, an alkanoylamino group of 2 to 5 carbon atoms or an optionally substituted benzoylamino group;



Formula (2)

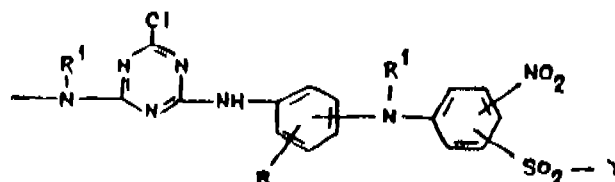
K is a 1-hydroxynaphthylene radical which contains the azo group bonded in the 2-position, or is a 2-hydroxynaphthylene radical which contains the azo group bonded in the 1-position, which may both be substituted by 1 or 2 sulfo groups or by an optionally substituted alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group or by an optionally substituted alkanoylamino group of 2 to 5 carbon atoms or a benzoylamino group and 1 or 2 sulfo groups, or

K is a naphthylene radical which may be substituted by 1 or 2 sulfo groups or may be substituted by 1 or 2 sulfo groups and an optionally monosubstituted or disubstituted amino group, the substituents on the amino groups belonging to the group or substituents consisting of: alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radical of 1 to 4 carbon atoms (in which the phenyl radical may be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, sulfo and/or carboxy), phenyl and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, chlorine, carboxy and/or sulfo, or

K is a 1-aminonaphthylene radical which contains the azo group bonded in the 2-position, or is a 2-aminonaphthylene radical which contains the azo group bonded in the 1-position, where both the aminonaphthylene radicals may be substituted by 1 or 2 sulfo groups or by a hydroxy group in the 5-, 6-, 7- or 8-position or by this hydroxy group and 1 or 2 sulfo groups, or

K is a phenylene radical which may be substituted by 1 or 2 substituents from the group of 2 alkyl of 1 to 4 carbon atoms, 2 alkoxy of 1 to 4 carbon atoms, 2 chlorine, 1 bromine, 1 alkanoylamino of 2 to 5 carbon atoms which may be substituted, 1 benzoylamino, 1 sulfo, 1 carboxy, 1 ureido, 1 phenylureido, 1 alkylsulfonylamino of 1 to 4 carbon atoms, 1 amino and 1 monosubstituted or disubstituted amino whose substituents are alkyl of 1 to 4 carbon atoms, hydroxyalkyl of 1 to 4 carbon atoms, carboxyalkyl of 2 to 5 carbon atoms, sulfoalkyl of 1 to 4 carbon atoms, sulfatoalkyl of 1 to 4 carbon atoms, cyanoalkyl of 2 to 5 carbon atoms, carbalkoxyalkyl having alkyl radicals of 1 to 4 carbon atoms each, phenylalkyl having an alkyl radical of 1 to 4 carbon atoms (whose phenyl radical can be substituted by methyl, ethyl, methoxy, ethoxy, chlorine, carboxy and/or sulfo), phenyl and phenyl which is substituted by alkyl of 1 to 4 carbon atoms, alkoxy of 1 to 4 carbon atoms, carboxy, chlorine and/or sulfo;

Z is a radical of the general formula (3) of the accompanying drawings



Formula (3)

in which

R¹ stands for a hydrogen atom or an optionally substituted alkyl group of 1 to 4 carbon atoms, where the two **R¹**s can be identical to or different from each other,

R denotes a hydrogen atom or a sulfo group and

Y is the vinyl group or a β -thiosulfatoethyl, β -phosphatoethyl, β -chloroethyl or β -sulfatoethyl group,

which process comprises

coupling a diazonium compound of an amine of the general formula $A-NH_2$ where **A** has the meaning mentioned above, with a couplable compound of the general formula $H-K-Z$ where **K** and **Z** have the meaning mentioned above, with the proviso that the fibre-reactive group **Z** is not bonded in that position in the coupling component $H-K-Z$ which hinders the coupling.

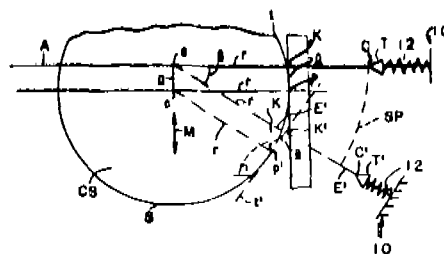


Fig. 2

CLASS : 107-K.
Int. Cl. : F 01 I 7/02.

169060

REGISTRATION OF DESIGNS

ROTARY PISTON PUMP ASSEMBLY.

Applicant : INTERATOM GMBH, OF FRIEDRICH-EBERT-STR., D-5060 BERGISCH GLADBACH, WEST GERMANY.

Inventors : (1) EWALD JUNGHANS, (2) GABRIEL TIT-
TIZER.

Application No. 670/Cal/1988, filed on 5th August, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents
Rules, 1972), Patent Office, Calcutta.

6 Claims

Rotary piston pump assembly, comprising a rotary piston pump having a housing with first, second and third sectors, a pump body with a plurality of radially displaceable pistons successively passing through said first, second and third sectors during one rotation, each two of said pistons enclosing a space therebetween forming an independent pumping chamber, and inlet and outlet means communicating with said pumping chambers, each of said pumping chambers having a pump output equal to zero during passage of said enclosing pistons through said first sectors.

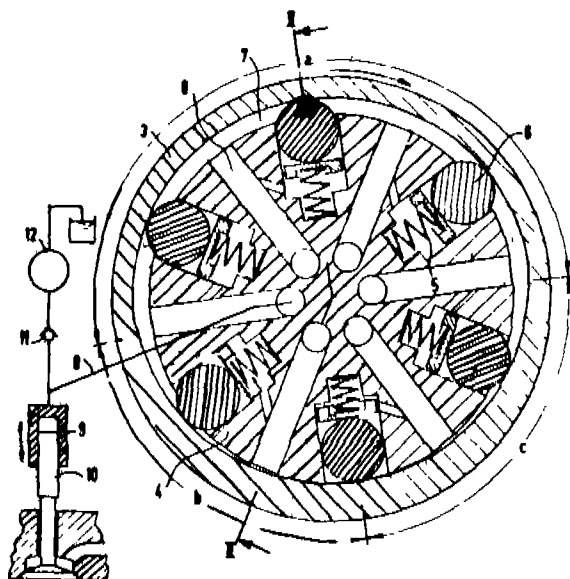


Fig. 1

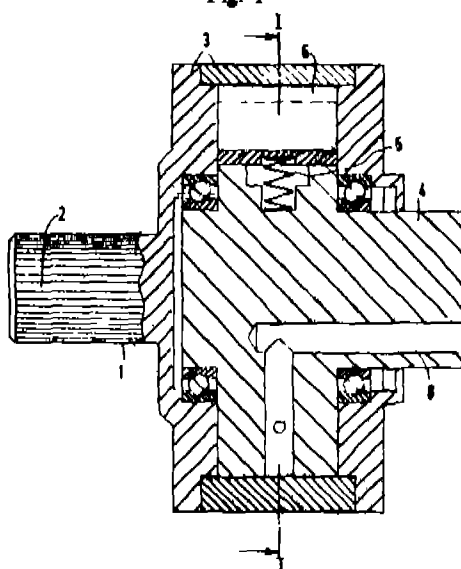


Fig. 2

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries is the date of the registration of the design included in the entry.

Class 1. No. 162862. Cartier International B.V., a Dutch Company of Herengracht 436, Amsterdam-C, Netherlands. "Clasp". January 24, 1991.

Class 1. No. 162863. Cartier International B.V., a Dutch Company of Herengracht 436, Amsterdam-C, Netherlands. "Clasp". January 24, 1991.

Class 1. No. 162864. Cartier International B.V., a Dutch Company of Herengracht 436, Amsterdam-C, Netherlands. "Buckle". January 24, 1991.

Class 1. No. 162841. Airtech Private Ltd. of 2A, Shankar Market, Connaught Circus, New Delhi-110001, India. "Garbage Bin". January 15, 1991.

Class 1. No. 162884. Airtech Private Ltd. of 2A, Shankar Market, Connaught Circus, New Delhi-110001, India. "Garbage Bin". February 1, 1991.

Class 3. No. 162602. HGF Laminates of 25, Community Centre, East of Kailash, New Delhi-110065, India, an Indian Company.

Class 3. No. 162778. Marico Industries Ltd. of Kanmoor House, 281/287, Narsinatha Street, Bombay-400009, Maharashtra, India. "Bottle". December 24, 1990.

Class 3. No. 162779 & 162780. Marico Industries Ltd. of Kanmoor House, 281/287, Narsinatha Street, Bombay-400009, Maharashtra, India. "Bottle". December 24, 1990.

Class 3. Nos. 162817 & 162818. Fufee Umbrella Pvt. Ltd. of No. 18, 18/1, New Santhepet, Mysore-560021, Karnataka, India. "Umbrella Handles". January 8, 1991.

Class 3. 162820. Adish Pal Singh Dhillon, an Indian Citizen of 1235/2, Sector 43-B, Chandigarh, India. "Housing for Refrigeration Machine". January 8, 1991.

Class 3. No. 162848. Jagatjit Industries Ltd. of Ashoka Estate, 9th Floor, 24-Barakhamba Road, New Delhi-110001, India, Indian Company. "Bottle". January 16, 1991.

Class 3. No. 162857. Varun Enterprises, Vishwakarma Bldg., 2nd Floor, Central Avenue Road, Chembur, Bombay-400071, Maharashtra, Indian Proprietary Concern. "Comb". January 23, 1991.

Class 3. No. 162866. Eureka Forbes Ltd. of 7, Chakraborty Road (South), Calcutta-700025, W.B., India, Indian Company. "Stick Vacuum Cleaner". January 24, 1991.

Class 3. No. 162882. Walambia Industries, Gogate Wadi, Off: Aarey Road, Goregaon (West), Borabay-63, Maharashtra, India, Indian Partnership Firm. "Flask". January 31, 1991.

Class 3. No. 163035. Devi Polymers (Pvt.) Ltd. of T.N.K. House, 48, Anna Salai, Madras-600002, T.N., India, an Indian Company. "Water Tank Panel". March 15, 1991.

Class 3. No. 163036. Devi Polymers (Pvt.) Ltd. of T.N.K. House, 48, Anna Salai, Madras-600002, T.N., India, an Indian Company. "Water Tank Panel". March 15, 1991.

Class 3. Nos. 152955 & 162956. Pacolls Products, Indian Proprietary Firm of Kasturinagar Society, Behind Shreyas School, Majjalpur, Vadodara-390004, Gujarat, India. "Container". March 4, 1991.

Class 3. No. 163037. Devi Polymers (Pvt.) Ltd. of T.N.K. House, 48, Anna Salai, Madras-600002, T.N., India, an Indian Company. "Water Tank Panel". March 15, 1991.

Class 3. No. 163104. B.R. Plastica, 314, A to Z Industrial Estate, 3rd Floor, G. Kadam Marg, Bombay-400013, Maharashtra, Indian Partnership Firm. "Comb". April 3, 1991.

Class 10. No. 163254. Bata India Limited of 30, Shakespeare Sarani, Calcutta-700017, West Bengal, India, "Footwear". May 23, 1991.

Copyright extended for the 2nd period of five years

Nos. 156354, 157055, 156744, 157515, 156620 & 162430 Class 1.

Nos. 157054, 157262, 157310, 155843 to 155847, 157185, 157067, 157197 to 157201, 157161, 157125, 157548, 157369, 156632, 157551, 157273 & 157140 Class 3.

Nos. 160529 & 161228 Class 4.

No. 160601 Class 11.

Copyright extended for the 3rd period of five years

Nos. 151401, 150988, 150344, 162430, 151322, 151311 to 151313, 150646 to 150649 Class 1.

Nos. 151296, 151035 to 151037 & 151058 Class 3.

Nos. 160529 & 161228 Class 4.

No. 160601 Class 11.

No. 150849 Class 12.

R. A. ACHARYA,
CONTROLLER GENERAL OF PATENTS,
DESIGNS AND TRADE MARKS